We claim:

SUB A4 1. A system for broadcasting and receiving location specific data comprising

a transmitter operable to transmit a succession of information segments containing information of potential interest to subsets of users of the general broadcast system, said transmitter being operable to broadcast generally said information segments;

means for inserting a location designation code into at least one of said information segments, whereby the information segments may be associated with at least one of a designated point, area and volume;

at least one receiver, operable to decode the successive information units, coupled to a memory for storing a location selection code, identifying at least one of a selected point, area and volume;

wherein the receiver comprises an input means coupled to the memory for loading said location selection code, whereby the location selection code is changeable, means for comparing the location selection code and the location designation code, and for identifying an overlap, and means for processing selected ones of the information units as a function of said overlap.

2. The system for broadcasting and receiving location specific data according to claim 1, wherein the information

B segments ~~units~~ are encoded in at least one of audio, video, digital data, subcarrier data, and data embedded in the one of said audio or video signal.

3. The system for broadcasting and receiving location specific data according to claim 2, wherein the digital data is encoded in the vertical blanking interval of a video signal.

4. The system for broadcasting and receiving location specific data according to claim 1, wherein the transmission is effected over a community cable distribution system.

5. The system for broadcasting and receiving location specific data according to claim 1, wherein the transmission is effected as an over-the-air broadcast system.

6. The system for broadcasting and receiving location specific data according to claim 1, wherein the transmission is effected over a data network.

7. The system for broadcasting and receiving location specific data according to claim 1, wherein the transmission is effected over a common carrier.

8. The system for broadcasting and receiving location specific data according to claim 1, wherein said means for inserting said location designation code in the information

B segments ~~units~~ is functionally coupled to a plurality of receivers forming a subnetwork of a larger broadcast network.

SUBA5 9. The system for broadcasting and receiving location specific data according to claim 1, further comprising conversion means associated with at least one of the transmitter and receiver, the conversion means being operable to translate at least one of the location designation code and

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the location selection code between two representations of location.

10. The system for broadcasting and receiving location specific data according to claim 9, wherein said conversion means is operable to translate between absolute and relative geographic coordinates.

11. The system for broadcasting and receiving location specific data according to claim 9, further comprising a memory, wherein said conversion means is operable to translate between alternate codes and geographic coordinates.

12. The system for broadcasting and receiving location specific data according to claim 1, wherein the receiver is operationally coupleable to a position reporting device including at least one of a lateral position encoding unit and an altitude encoding unit.

13. The system for broadcasting and receiving location specific data according to claim 12, wherein the geographic reporting unit comprises at least one of a Global Positioning System unit and a ~~LORAN unit~~ Long Distance Radio Navigation System (LORAN) unit.

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SUB B6

14. A method for processing location specific data transmitted on a general broadcast system, comprising:

transmitting a succession of information segments containing information of potential interest to subsets of users of the general broadcast system;

transmitting at least one location designation code containing information designating at least a geographical point to which one of said information segments relates;

encoding in a data processor at least a point of interest to a user of the general broadcast system, using at least one

geographical coordinate which defines at least one location selection code;

receiving the information segments at a receiver coupled to the data processor, and comparing the location selection code with the location designation code via the data processor to determine an overlap thereof defining at least one particular information segment as an information segment of interest; and,

processing the information segment of interest for presentation to the user.

15. The method for processing location specific data according to claim 14, comprising employing an identification of lateral position and elevation for at least one of the location designation code and the location selection code .

16. The method for processing location specific data according to claim 14, comprising representing at least one of the location designation code and the location selection code by an alternate code representing a location.

17. The method for processing location specific data according to claim 16, further comprising including in said alternate code at least one of a street address, a telephone number, a postal code, a block designation, a political subdivision and an informal geographic subdivision.

18. The method for processing location specific data according to claim 17, wherein at least one of the location selection code and the location designation code specifies a region having an area, and determining said overlap by at least a part of the other of said at least one of the location selection code and the location designation code falling in the region.

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~~19~~. The method for processing location specific data according to claim 14, further comprising accepting input from the user to the data processor for at least partly defining the location selection code, whereby the location selection code is variable.

SUBA7 20. The method for processing location specific data according to claim 14, further comprising operating a position reporting device at least temporarily to determine a code representing a location of the user, and entering said code into the data processor to at least partly define said location selection code.

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~~21~~. The method for processing location specific data according to claim 31 ~~20~~, wherein the position reporting device comprises at least one of a geographic reporting unit operable to determine longitude and latitude, and an altitude sensing unit operable to determine elevation.

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~~22~~. The method for processing location specific data according to claim 32 ~~21~~, wherein the altitude sensing unit comprises a barometer for providing an air pressure reading to the input means, and further comprising transmitting a normalized ambient pressure in at least one of said information segments, and converting said air pressure reading to an elevation as a function of said air pressure reading and said normalized ambient pressure.

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~~23~~. The method for processing location specific data according to claim 32 ~~21~~, wherein the geographic reporting unit comprises at least one of a Global Positioning System unit and a ~~LORAN unit~~ Long Distance Radio Navigation System (LORAN) unit.

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~~24~~. The method for processing location specific data according to claim 31 ~~20~~, wherein the receiver is movable and

further comprising sensing the location of the user at least intermittently to at least partly define a varying location selection code.

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~~25~~. The method for processing location specific data according to claim 14, further comprising filtering the information segment and rejecting information segments which are not of interest.

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~~26~~. The method for processing location specific data according to claim 14, comprising at least one of preferentially storing and preferentially displaying to the user the information segment as a function of a relationship between the location designation code and the location selection code.

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~~27~~. The method for processing location specific data according to claim 14, comprising transmitting the location designation code to align with the information segments in real time, and further comprising said receiving, comparing and processing of the information segment in real time.

SUBA8 28. The method for processing location specific data according to claim 14, comprising transmitting the location designation code for the information segment in a transmission preceding transmission of the information segment and referencing the information segment to the location code when receiving, comparing and processing the information segment.

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~~29~~. The method for processing location specific data according to claim 14, comprising defining more than one location of interest for at least one of the location designation code and the location selection code.

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30. The method for processing location specific data according to claim 14, comprising at least partly defining at least one of the location designation code and the location selection code as a border of a region.

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31. The method for processing location specific data according to claim 30, wherein the at least one of the location designation code and the location selection code defines a plurality of borders bounding the respective region.

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32. The method for processing location specific data according to claim 14, wherein each of the information segments has an individual location designation code.

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33. The method for processing location specific data according to claim 14, wherein the location selection code identifies a plurality of locations, and further comprising prioritizing processing of information segments based upon a function of a relationship between the location designation code and the location selection code, for preferentially processing information segments referring to at least one of said locations over others of said locations.

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34. The method for processing location specific data according to claim 14, wherein the at least one information segment represents a localized hazard warning.

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35. The method for processing location specific data according to claim 14, wherein the at least one information segment represents a localized offer of an opportunity.

SUBA9 36. An apparatus for location specific processing of generally broadcast data, the data including successive information units containing respective location designation codes, comprising:

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means for receiving successive information units, coupled to a memory operable to store a location selection code;

an input means coupled to the memory for loading said location selection code;

means for comparing the location selection code and the location designation code, and identifying an overlap;

means for processing selected ones of the information units as a function of said overlap.

37. The apparatus according to claim 36, wherein the input means includes switch means for manual operation by a user.

38. The apparatus according to claim 36, wherein the input means comprises an automatic location sensor.

39. The apparatus according to claim 38 wherein the automatic location sensor is associated with a mobile unit, and is operable to update said location selection code.

40. The apparatus according to claim 36, wherein the input means is coupleable to a position reporting device comprising at least one of a geographic reporting unit operable to determine longitude and latitude, and an altitude sensing unit operable to determine elevation.

41. The apparatus according to claim 40, wherein the geographic reporting unit comprises at least one of a Global Positioning System unit and a ~~LORAN unit~~ Long Distance Radio Navigation System (LORAN) unit.

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42. The apparatus according to claim 36, further comprising conversion means being operable to translate at least one of the location designation code and the selection code between two representations of location.

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43. The apparatus according to claim 42, wherein said conversion means is operable to translate between absolute and relative geographic coordinates.

44. The apparatus according to claim 42, further comprising a memory, wherein said conversion means is operable to translate between alternate codes and geographic coordinates.